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09/972,362

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Farhan Ahmad

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EXAMINER

DIVECHA, KAMAL B

ART UNIT

PAPER NUMBER

2151

DATE MAILED: 07/18/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/972,362

Applicant(s)

AHMAD ET AL.

Examiner

KAMAL B. DIVECHA

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 16 June 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1,2,4-9 and 21-37 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1, 2, 4-9 and 21-37 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)             | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                                    |

**Response to Arguments**

Claims 1, 2, 4-9 and 21-37 are pending in this application.

**Claim Rejections - 35 USC § 101**

The 35 USC 101 rejections have been withdrawn.

Applicant's arguments filed 6/16/2006 have been fully considered but they are not persuasive.

In response filed, applicant argues in substance that:

a. Nowhere does the cited col. 13 (i.e. Weber) disclose displaying information on application processes associated with the represented hosts and switching fabric component in the network (remarks, page 10). The cited management application of col. 16 (i.e. Weber) does not reside on the device as claimed (remarks, page 10-11). Nowhere does the cited col. 7 (i.e. Weber) anywhere disclose launching displayed processes that reside on the network host or switching fabric component (remarks, page 11). Nowhere does the cited Weber anywhere disclose the claim requirements of displaying information on the application processes associated with hosts and switching fabrics in a network, where the application processes reside on the hosts and switching fabric, and then launching the selected application process residing on the represented host or switching fabric (remarks, page 12). Nowhere do the cited col. anywhere disclose the claim requirement that selection of an object executes an application process residing on a host or switching component in a network (remarks page 13).

In response to argument [a] above, Examiner disagrees for the at least following reasons:

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First, applicant specification states: (pages 174-177)

#### Launching Device Specific Applications

As discussed above, a SAN according to the invention can include a variety of components, such as one or more digital data processors hosts, one or more storage device, and a switching fabric, having a variety of components, such as, switches, hubs, gateways, for providing communication between the hosts and the storage devices. These components are typically acquired from different vendors, and have various application software associated therewith. For example, the switching fabric components can have vendor-specific management applications that allow configuring and/or managing these components.

The illustrated embodiment permits the SAN operator/administrator to execute these vendor-specific applications from a single graphical user interface, to wit, that SAN manager GUI 20, in a manner described in more detail below.

With reference to FIGURE 6 and FIGURE 42, the SAN manager service 38 maintains a representation of the SAN that provides information, inter alia, regarding the identity of the SAN components, and the connectivity of these components. In addition, the manager service 38 maintains for selected components, for example, the switching fabric components, information regarding management applications specific to them. These can be applications, by way of non-limiting example, residing directly on the components, applications invoked or effected through HTTP, telnet or other servers residing on the components or on proxy services residing elsewhere, and/or via applications running on the SAN manager itself. This information is stored, for example, in a file, referred to herein as a "Rules" file, which identifies each of the selected components and the applications and communication interfaces supported by that component, e.g., telnet, SNMP. In the illustrated embodiment, a mark-up language, e.g., XML, is utilized to format the information contained in the Rules file, though in other formats may be used instead or in addition.

Information regarding the component management applications can be obtained from the operator/administrator (e.g., via prompt and/or menu option when the respective components are first added to the system or subsequently) and/or obtained directly from the components themselves. In the case of the latter, the information can be obtained via standardized queries, such as Management Server queries or FC MANAGEMENT MIB queries. In the case of components that cannot respond to such queries with the necessary information (as where the corresponding management application resides on the SAN manager itself) and/or that have multiple management applications, any information obtained from the component is augmented in the Rules file with information, e.g., obtained from the operator/administrator, identifying the necessary or preferred application. The Netview server can effect retrieval of the SAN representation from the manager service 38 and the display of selected information discerned from the retrieved representation on the Netview console 52, as described in detail above. In one embodiment, the Netview console 52 displays a plurality of graphical objects, e.g., icons, each of which represents one of the SAN components. Alternatively, a textual list of the SAN components can be displayed. Further, the Netview console 52 provides an operator, e.g., the SAN administrator, with a user interface) element, such as keyboard or mouse, that permits selection of one of the displayed components.

The Netview server allows the operator to launch an application process associated with a selected SAN component, such as, a management application residing on that component, such as, a switch, in a manner described below. In response to the selection of a graphical object representing a SAN component, the Netview server accesses the Rules file to obtain information regarding the application processes associated with that selected component, and effects the display of this information, for example, in the form of a menu, on the Netview console 52. In some embodiment, a plurality of management applications residing on a selected component are displayed while in other embodiments, only the primary management application is displayed. To facilitate the display of information regarding on the SAN components on the Netview console, in some embodiments, the Netview server stores the information retrieved from the SAN manager service 58 regarding the applications residing on the SAN components in a persistable storage.

The Netview server 54 responds to the selection of one of the displayed application processes by effecting the launching of that application process via an interface process, such as a web-based browser application, a telnet process, or an SNMP application. More particularly, the Netview server 54 communicates with the SAN manager service 38 to retrieve information, such as, launch method and its respective parameters, therefrom. The SAN manager service responds to a request from the Netview server for the launch information by

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parsing the Rules file to generate an object, e.g., an XML object that contains the requisite information, and transmits the information to the Netview server. The Netview server utilizes the object returned from the SAN manager service to effect the launching of the selected application process. Once the selected application, e.g., a management application, is launched, the operator can utilize the application, via the interface software provided by the Netview server, to configure and/or manage the SAN component on which the application resides. This advantageously allows the operator, e.g., the SAN administrator, to manage a variety of SAN components, having different management applications, from a single entry point, that is, from the Netview server/console.

The specification expressly teaches in response to the selection of an object presenting a SAN component (i.e. host or switching fabric), the Net view server accesses the Rules file to obtain information regarding the application processes associated with the component. To facilitate the display of information regarding the SAN components on the Net view console, the Net view server stores the information retrieved from the SAN manager services regarding the applications residing on the SAN components in a persistable storage. In response to selection, the Net view server responds to the selection of one of the displayed application processes by effecting the launching of that application process via an interface process.

Weber expressly discloses the similar subject matter as admitted by the applicant in various parts of the response filed on June 16, 2006.

Secondly, Weber does indeed teach and disclose the process wherein the management application process is residing in the device itself, wherein the displaying, selecting and launching is done through the web browser (col. 8 L16-46 and fig. 4).

Third, Weber does teach “selection of an object executes an application process residing on a host or switching component in a network (col. 7 L15 to col. 8 L15).

Technically, It should have been clear that Weber does teach and disclose the process as claimed in the instant application because of the following facts:

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the components in a SAN are typically acquired from different vendors, and have various application software associated therewith (see applicant specification page 174 lines 10-17 and Weber, col. 1 L40-67);

present invention solves the problem of executing these vendor-specific applications from a single graphical user interface, so does the Weber (see applicant specification, page 174 lines 19-21 and Weber, fig. 1 and fig. 4).

The device-specific management application of Weber is retrieved from a storage which when launched effects the execution of the control software of the associated device, which resides in the device (col. 7 L15 to col. 8 L15: launching a program that resides on the host, as argued by the applicant). The device-specific management application is the application that is compatible with the control software. So technically, the management application provides the information on the control software residing in the device and effects the execution of the control software through the management application, which would then enable administrator to manage the device.

Without the execution of the control software, the management of the vendor-specific devices would not be possible. So the process of displaying information on application processes, receiving selection of one the displayed application processes and launching the vendor-specific software can simply be considered inherent based on the fact that every component or device is associated with its specific control software as admitted by the applicant and as per Weber's disclosure.

Also note that the claims does not impose any restriction that the process of displaying information, selecting one of the displayed information and launching the application process

residing on the host is implemented without the interaction or involvement of the management application, directly and/or indirectly or in other words the launching or execution of the application process residing on the hosts or switching fabric is done directly or indirectly.

The claim simply states:

A system in communication with a network comprising one or more storage devices and one or more hosts via a switching fabric component, wherein application processes reside on the hosts, wherein the application processes configure and manage the hosts in which the application processes execute, comprising:

a manager in communication with the storage devices, the switching fabric component, and hosts in the network; and

an interface process in communication with the manager, a switching fabric component, and the hosts, wherein the interface process performs:

obtaining information on hosts and the switching fabric component in the network from the manager;

displaying information representing the hosts and switching fabric component in the network;

displaying information on application processes (note that application that resides on the host is not displayed, only information on application is displayed) associated with the represented hosts and switching fabric component in the network;

receiving selection of one of the displayed application processes (interpreted as receiving the selection of the information);

launching the selected application process residing on the represented hosts or switching fabric component (launching or executing the application and/or software residing in the device).

Therefore for the at least reasons set forth above, Weber does disclose the process as claimed.

b. Nowhere does Weber disclose displaying objects representing application processes on the hosts or switching fabric component (remarks, page 12-13). There is no disclosure of displaying graphical objects representing application processes and launching such application processes that reside on the host or switching fabric component.

In response to [b]: Examiner disagrees because the subject matter argued by the applicant is clearly discernable from the Weber's disclosure.

For example: Column 13 line 1 to column 14 line 41 expressly teaches displaying graphical representation i.e. graphical objects, which when selected executes the control software and the application processes associated with the device (col. 14 L9-15, col. 13 L44-49 and col. 7 L15-col. 8 L47). Therefore the specific-device (a graphical object) is representing the application process associated with it because when the specific-device is double clicked or selected, the device's associated application process is launched, which in turn executes the control software of the specific-device node.



c. Nowhere does the cited col. anywhere disclose the claim requirements that a store contains information on application processes residing in hosts and a switching component in a network (remarks, page 13).

In response to [c]: Examiner disagrees for the at least following reasons:

First, the claim does not distinctly claim or suggest that a store contains information on application processes residing in hosts and a switching fabric.

Secondly, Weber expressly discloses a store containing information on application processes residing on hosts (col. 8 L16-47).

Third, Weber teaches that each device is associated with vendor-specific software (col. 1 L40-42). Therefore, all the devices in the network have a device-specific software or application and technically speaking, there must be some type of storage or store that would have stored said software and/or application.

Fourth, the claim states “a store containing information regarding one or more hosts and the switching fabric component and one or more application processes residing on selected hosts and the switching fabric component”.

In one embodiment, Weber discloses storage for storing the management applications associated with the device, which when launched executes the control software of the device. In other words, the management application is the information regarding the one or more application processes residing on the hosts and switching fabric.

**DETAILED ACTION**

**Claim Rejections - 35 USC § 102**

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

1. Claims 1-2, 4-9, 21-37 are rejected under 35 U.S.C. 102(e) as being anticipated by Weber et al. (hereinafter Weber, U. S. Patent No. 6,480,901).

As per claim 1, Weber discloses a system in communication with a network comprising one or more storage devices and one or more hosts via a switching fabric component, wherein application processes reside on the hosts, wherein the application processes configure and manage the hosts in which the application processes execute (fig. 1, col. 1 L25-58, col. 6 L45-54), comprising:

a manager in communication with the storage devices, the switching fabric component and hosts in the network (fig. 1 and col. 2 L3-8, col. 2 L22-44); and

an interface process in communication with the manager, a switching fabric component and the hosts, wherein the interface process performs (col. 13 L1-9, fig. 5 item #510, col. 2 L22-44, col. 9 L31-35):

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- obtaining information on hosts and the switching fabric component in the network from the manager (col. 13 L9-49, col. 4 L34-51, col. 7 L15-20, col. 9 L59-66);
- displaying information representing the hosts and switching fabric components in the network (col. 13 L9-49, col. 4 L34-54, col. 7 L15-30);
- displaying information on application processes associated with the represented hosts and switching fabric component in the network (col. 13 L1-49, col. 16 L58-67);
- receiving selection of one the displayed application processes (col. 7 L25-39 and col. 13 L1-49);
- launching selected application process residing on the represented hosts or switching fabric components (col. 13 L1-49 and col. 7 L25-39).

As per claim 2, Weber discloses a graphical output device coupled to the interface process for displaying one or more graphical objects representing the application processes on the hosts or the switching fabric component, wherein the interface process is coupled to the graphical output device for effecting the display of the graphical objects on the graphical output device (col. 13 L1-67 and col. 4 L34-51, fig. 6, col. 9 L10-42).

As per claim 4, Weber discloses the system wherein the interface process responds to selection of one of the objects representing one application process by effecting execution of the application process represented by that object (col. 13 L1-49 and col. 14 L10-15).

As per claim 5, Weber discloses a store containing information regarding one or more hosts and the switching fabric component and one or more application processes residing on selected hosts and the switching fabric component (col. 2 L26-36, col. 8 L27-47).

As per claim 6, Weber discloses the system wherein the interface process accesses the store, upon selection of one graphical object representing one host or the switching fabric component, to identify one application process residing on the host or the switching fabric component represented by the selected object (col. 14 L10-15 and col. 13 L1-49).

As per claim 7, Weber discloses the system wherein the application process is any of an executable application, a web-browser application, a telnet session, or an SNMP application (col. 10 L54-65, col. 6 L15-26, fig. 4 item #406, fig. 5 item #510, 512).

As per claim 8, Weber discloses the system wherein the information on the hosts includes an identifier for the host and application processes residing on the host (col. 13 L10-49).

As per claim 9, Weber discloses the system wherein at least one of the graphical objects representing one host provides a textual description of that component (fig. 6 and col. 13 L37-67, col. 14 L23-40).

As per claims 21-37, they do not teach or further define over the limitations in claims 1-2, 4-9. Therefore claims 21-37 are rejected for the same reasons as set forth in claims 1-2, 4-9.

**Additional References**

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure (see PTO-892 dated 3/16/2006).

**Conclusion**

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).


A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to KAMAL B. DIVECHA whose telephone number is 571-272-5863. The examiner can normally be reached on Increased Flex Work Schedule.

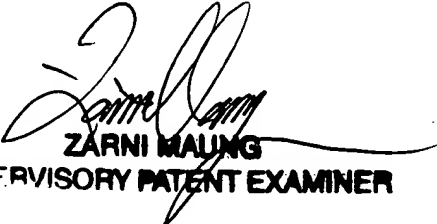
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Zarni Maung can be reached on 571-272-3939. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Kamal Divecha  
Art Unit 2151  
July 7, 2006.



**ZARNI MAUNG**  
SUPERVISORY PATENT EXAMINER